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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/027,716	10/24/2001	Sven O. Lund	1020.P12870	9752
57035	7590	08/28/2006	EXAMINER	
KACVINSKY LLC 4500 BROOKTREE ROAD SUITE 102 WEXFORD, PA 15090			WON, MICHAEL YOUNG	
			ART UNIT	PAPER NUMBER
			2155	

DATE MAILED: 08/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	10/027,716		LUND ET AL.	
	Examiner		Art Unit	
	Michael Y. Won		2155	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5,7-9,11,12 and 14-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5,7-9,11,12 and 14-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is in response to the Request for Continued Examination and Amendment filed July 14, 2006.
2. Claims 1, 8, 11, and 14 have been amended and claims 6, 10, and 13 have been cancelled.
3. Claims 1-5, 7-9, 11, 12, and 14-19 have been examined and are pending with this action.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

4. Claims 1, 8, 11, and 14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1, 8, 11, and 14 set forth a limitation "wherein said probe values and configuration information **may** comprise a virtual channel identifier (VCI) and a virtual path identifier (VPI) (emphasis added). The language fails to particularly point out and distinctly claim whether the "probe values and configuration information" comprise a

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virtual channel identifier (VCI) and a virtual path identifier (VPI) or not. The limitation renders the claim indefinite.

Claims 1 and 14 recites the limitation "said PVC" on page 2 and page 5, respectively, of the claim amendment. There is insufficient antecedent basis for this limitation in the claims.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-5, 7-9, and 14-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Langley et al. (US 6,700,890 B1).

INDEPENDENT:

As per **claim 1**, Langley teaches a method to configure a network device, comprising:

receiving a request to configure a first permanent virtual circuit (PVC) (see col.3, lines 16-21: "request... and update the configuration information") between a digital subscriber line (DSL) (see col.5, lines 46-49: "ADSL") device (see Fig.2A, #220; and col.6, lines 25-26: "endpoint device 220") and a DSL access module (DSLAM) (see Fig.2A, #210 and col.4, lines 30-34: "ATM switch 210"); and

automatically configuring said first PVC using a list of probe values (see Fig.2B) sent to probe for configuration information for said PVC (see col.3, lines 33-37: "The endpoint devices uses the PVC identifiers to associate with the subnetwork the configuration information received for the PVC"; col.4, lines 47-65; and col.5, lines 9-11 & 21-36: "VCI and VPI values are not known, an SNMP "getnext" command sent from the requesting device to the receiving device... In this manner, all of the rows of the table 280 may be obtained"), and using said configuration information to configure said first PVC (see col.3, lines 17-21: "The endpoint device can then request the configuration information for that PVC, and update the configuration information stored in the endpoint device"; and col.5, lines 17-20: "The receiving device returns the parameter that was sent to it as part of the request, and the corresponding value of the requested configuration parameter"), wherein said probe values and configuration information may comprise a virtual channel identifier (VCI) and a virtual path identifier (VPI) (see Fig.2B and col.4, lines 59-65).

Langley does not explicitly teach of probe values sent with test packets.

However these differences are only found in the nonfunctional descriptive material and are not functionally involved in the steps recited. The probe values will be sent regardless of the data. Thus this descriptive material will not distinguish the claimed invention from the prior art in terms of patentability, see *In re Gulack*, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983); *In re Lowry*, 32 F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to send any data with the probe values because such data does not functionally relate to the steps in the method claimed and because the subjective interpretation of the test data does not patentably distinguish the claimed invention.

As per **claim 8**, Langley teaches of a system to configure a network device, comprising:

- a digital subscriber line (DSL) (see col.5, lines 46-49: "ADSL") customer premise equipment (CPE) (see Fig.2A, #220; and col.6, lines 25-26: "endpoint device 220");

- a DSL access module (DSLAM) (see Fig.2A, #210; and col.4, lines 30-34: "ATM switch 210") connected to said DSL CPE (see Fig.2A);

- a DSL (see col.5, lines 46-49) probing module to use a list of probe values (see Fig.2B) sent to probe for configuration information (see col.3, lines 33-37: "The endpoint devices uses the PVC identifiers to associate with the subnetwork the configuration information received for the PVC"; col.4, lines 47-65; and col.5, lines 9-11 & 21-36: "VCI and VPI values are not known, an SNMP "getnext" command sent from the requesting device to the receiving device... In this manner, all of the rows of the table 280 may be obtained") for use in automatically configuring a permanent virtual circuit (PVC) between said DSL CPE and said DSLAM (see col.3, lines 17-21: "The endpoint device can then request the configuration information for that PVC, and update the configuration information stored in the endpoint device"; and col.5, lines 17-20: "The receiving device

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returns the parameter that was sent to it as part of the request, and the corresponding value of the requested configuration parameter”), wherein said probe values and configuration information may comprise a virtual channel identifier (VCI) and a virtual path identifier (VPI) (see Fig.2B and col.4, lines 59-65).

Langley does not explicitly teach of probe values sent with test packets.

However these differences are only found in the nonfunctional descriptive material and are not functionally involved in the steps recited. The probe values will be sent regardless of the data. Thus this descriptive material will not distinguish the claimed invention from the prior art in terms of patentability, see *In re Gulack*, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983); *In re Lowry*, 32 F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to send any data with the probe values because such data does not functionally relate to the steps in the method claimed and because the subjective interpretation of the test data does not patentably distinguish the claimed invention.

As per **claim 14**, Langley teaches an article comprising:

a storage medium (see col.4, lines 6-10);

said storage medium including stored instructions that, when executed by a processor (see col.4, lines 3-6), result in configuring a network device by receiving a request to configure a first permanent virtual circuit (PVC) (see col.3, lines 16-21:

“request... and update the configuration information”) between a digital subscriber line (DSL) (see col.5, lines 46-49: “ADSL”) device (see Fig.2A, #220; and col.6, lines 25-26: “endpoint device 220”) and a DSL access module (DSLAM) (see Fig.2A, #210 and col.4, lines 30-34: “ATM switch 210”), and

automatically configuring said first PVC using a list of probe values (see Fig.2B) sent to probe for configuration information for said PVC (see col.3, lines 33-37: “The endpoint devices uses the PVC identifiers to associate with the subnetwork the configuration information received for the PVC”; col.4, lines 47-65; and col.5, lines 9-11 & 21-36: “VCI and VPI values are not known, an SNMP “getnext” command sent from the requesting device to the receiving device... In this manner, all of the rows of the table 280 may be obtained”), and using said configuration information to configure said first PVC (see col.3, lines 17-21: “The endpoint device can then request the configuration information for that PVC, and update the configuration information stored in the endpoint device”; and col.5, lines 17-20: “The receiving device returns the parameter that was sent to it as part of the request, and the corresponding value of the requested configuration parameter”), wherein said probe values and configuration information may comprise a virtual channel identifier (VCI) and a virtual path identifier (VPI) (see Fig.2B and col.4, lines 59-65).

Langley does not explicitly teach of probe values sent with test packets.

However these differences are only found in the nonfunctional descriptive material and are not functionally involved in the steps recited. The probe values will be sent regardless of the data. Thus this descriptive material will not distinguish the

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claimed invention from the prior art in terms of patentability, see *In re Gulack*, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983); *In re Lowry*, 32 F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to send any data with the probe values because such data does not functionally relate to the steps in the method claimed and because the subjective interpretation of the test data does not patentably distinguish the claimed invention.

DEPENDENT:

As per **claims 2 and 15**, which respectively depend on claims 1 and 14, Love further teaches wherein said automatically configuring comprises: sending test packets to said DSLAM using said probe values; receiving a response packet to one of said test packets; retrieving said configuration information from said response packet (see claim 11 rejection above). Langley teaches of configuring said PVC using said retrieved configuration information (see claim 1 rejection above).

As per **claims 3 and 16**, which respectively depend on claims 2 and 15, Love further teaches wherein for each probe value in said probe table said sending comprises: retrieving a probe value from said list of probe values, wherein said probe value represents a virtual circuit (implicit: see col.3, lines 27-30; col.7, lines 21-22; and col.11, lines 47-51: if the system was "active probing", clearly the probe which

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comprises a test packet would comprise a value); enabling said virtual circuit (inherent); and sending a test packet over said virtual circuit (see col.3, lines 27-29).

As per **claims 4 and 17**, which respectively depend on claims 3 and 16, Langley teaches of further comprising disabling each virtual circuit that did not receive a response packet (implicit: see col.2, lines 18-25).

As per **claims 5 and 18**, which respectively depend on claims 1 and 14, Langley teaches of further comprising: receiving a request to configure a second PVC for said DSL device (see col.6, lines 3-8); receiving configuration information for said second PVC (see col.6, lines 9-19); and configuring said second PVC using said configuration information (see col.6, lines 19-24 and col.7, line 66-col.8, line 12).

As per **claims 7 and 19**, which respectively depend on claims 1 and 4 Langley teaches of further comprising: determining that a terminating condition has occurred prior to automatically configuring said first PVC (see col.8, lines 17-21); sending a message that said first PVC was not configured to a user (see col.8, lines 36-39); and receiving said configuration information for said first PVC from a user (inherent).

As per **claim 9**, which depends on claim 8, Langley further teaches wherein said DSL CPE comprises a DSL CPE consisting essentially one of the following: a DSL/asynchronous transfer mode (ATM) router (see col.1, lines 42-45), an asymmetric DSL (ADSL)/ATM router, a DSL/ATM bridge, an ADSL/ATM bridge, a DSL modem, and an ADSL modem.

6. Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Langley et al. (US 6,700,890 B1) in view of Klassen et al. (US 6,711,137 B1).

As per **claim 11**, Langley teaches of a probing module for a network device, comprising:

an event management module to automatically send packets using probe values (see Fig.2B) from a digital subscriber line (DSL) (see col.5, lines 46-49: "ADSL") device (see Fig.2A, #220; and col.6, lines 25-26: "endpoint device 220") to a DSL access module (DSLAM) (see Fig.2A, #210 and col.4, lines 30-34: "ATM switch 210") (see col.3, lines 33-37: "The endpoint devices uses the PVC identifiers to associate with the subnetwork the configuration information received for the PVC"; col.4, lines 47-65; and col.5, lines 9-11 & 21-36: "VCI and VPI values are not known, an SNMP "getnext" command sent from the requesting device to the receiving device... In this manner, all of the rows of the table 280 may be obtained");

a detection module to detect a packet received in response to at least one of said packets (see col.5, lines 21-36: "VCI and VPI values are not known, an SNMP "getnext" command sent from the requesting device to the receiving device... In this manner, all of the rows of the table 280 may be obtained" and col.7, lines 60-62: "detect when all the rows of the AtmVccEntry table have been received"); and

an extraction module to retrieve configuration information from said received packet, wherein said probe values and configuration information may comprise a virtual channel identifier (VCI) and a virtual path identifier (VPI) (see Fig.2B and col.4, lines 59-65).

Langley does not explicitly teach of test packets.

Klassen teaches of test packets (see col.4, lines 60-62: "probative test packets").

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to employ the teachings of Klassen within the system of Langley by implementing test packets within the probing module for a network device because Klassen teaches that test packets are employed for evaluating a communications network (see col.4, lines 6-11) and Langley teaches of communication network (see col.1, lines 24-25).

As per **claim 12**, which depends on claim 11, Langley teaches of further comprising a configuration module to configure a permanent virtual connection between said DSL and said DSLAM using said configuration information (see col.4, lines 30-34 and col.6, lines 32-41).

Response to Arguments

7. Applicant's arguments with respect to claim 1, 8, and 14 have been considered but are moot in view of the new ground(s) of rejection.

With respect to claims 1, 8, and 14, after careful review Langley teaches all the limitations (see rejection set forth above) except sent "with test packet", however this limitation does not distinguish the claimed invention over prior art because this information is subjective nonfunctional descriptive material. There is no functional limitation pertaining to a test packet. A claim suggesting a probe values sent with video

stream or sent with http packets or any other packet will not distinguish the claimed invention because these are merely data bits with no functional limitation.

Conclusion

8. Claims 1-5, 7-9, 11, 12, and 14-19 have been rejected and remain pending.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Y. Won whose telephone number is 571-272-3993. The examiner can normally be reached on M-Th: 7AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar can be reached on 571-272-4006. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Michael Won

A handwritten signature in black ink, appearing to read 'Michael Won', with a stylized, flowing script.

August 21, 2006